Application No. 10/532435 Page 3 Amendment After Final Attorney Docket No. P68.2I-11888-US01

Amendments To The Claims:

Claims 1-10 (cancelled)

11. (Currently amended) A billing system for determining transportation charges for <u>a</u> package movable along a conveyor, said billing system comprising:

a microprocessor;

a reader to read a package identifier associated with said package, said reader generating a package identification signal and transmitting the signal to a the microprocessor; and

a package sizer to measure a size of said package, the package sizer having a plurality of spaced non-contact optical sensors being positioned on at test least an y and a z z axis for measuring a height and a width of a package, and a means for measuring a length of said package, said width being determined by the package blocking one of or more of said sensors positioned along said z axis to create a reduction in reduce the amount of ambient light reaching said one or more sensors and by at least one of said sensors positioned along said z axis sensing said reduction, said means for measuring a length of said package the package sizer further comprising an apparatus to measure a speed of the package and a length of time the package takes to pass by the optical sensors; and

- a <u>the</u> microprocessor <u>being configured</u> to receive and correlate said package identification signal and said package size for billing purposes, said microprocessor including a data table for billing charges based on package sizes, the microprocessor further being configured to calculate a length of said package based on said speed and time measurements, whereby said measured package size can be compared to said data table to determine a transportation charge for said measured package.
- 12. (Previously Presented) A billing system as claimed in claim 11 wherein said y and z axis sensors define a measurement plane through which said package being measured passes.
- 13. (Original) A billing system as claimed in claim 12 wherein said sizer further includes optical signal sources directed at said optical sensors along the y axis.

- 14. (Original) A billing system as claimed in claim 13 further including optical input guides to shield said optical sensors from stray light sources.
- 15. (Original) A billing system as claimed in claim 13 further including optical signal guides to direct an optical output from said optical signal sources towards said optical sensors.
- 16. (Original) A billing system as claimed in claim 11 further including a motor to drive said conveyor to pass said package past said sensors.
- 17. (Original) A billing system as claimed in claim 16 further including a speed sensor to measure the actual speed of said package as it passes said sensors.
- 18. (Previously presented) A billing system as claimed in claim 11 wherein said system measures the time a package takes to pass past said sensors.
- 19. (Previously presented) A billing system as claimed in claim 11 further including a light source located above said z axis sensors.
- 20. (Currently amended) A method of determining transportation charges for packages by using a billing system having non-contact optical sensors, said method comprising the steps of:

identifying a package by means of a reader;

passing the package past sensors located in a y and z axis to measure a height and a width of said package, the width being measured by the sensors on said z axis sensing a reduction in ambient light caused by the package blocking said sensors on said z axis, and measuring a length of said package on an x axis by measuring a speed of said package, and by measuring a length of time said package takes to pass by the optical sensors;

determining a volume of said package from said readings from said sensors readings and said length of said package:

measuring a weight of the package;

correlating the package identifier with said measured weight and volume of said package

in a database:

displaying the measured weight and volume; and

determining a charge for said package based upon said measured weight and volume upon acceptance of the displayed package parameters.

- 21. (Original) A method of determining transportation charges for a package as claimed in claim 20 wherein said method further includes an initialization step, in which all of the non-contact optical sensors are temporarily energized to permit visual verification of system operation.
- 22. (Original) A method of determining transportation charges for a package as claimed in claim 21 further including the step of checking each optical sensor upon start up and detecting any faults therein.
- 23. (Original) A method of determining transportation charges for a package as claimed in claim 22 further including the step of displaying an error message upon a fault being detected in an optical sensor.
- 24. (Currently Amended) A method of determining transportation charges for a package as claimed in claim 23 further including the step of identifying a location of said detected fault and displaying said location of said detected folds fault.
- 25 (Previously presented) A billing system as claimed in claim 11 further including a weigh scale associated with said sizer, said weigh scale sensing a weight of each of said packages on said sizer and producing a weight signal, wherein said microprocessor receives said weight signal and correlates the same with said package identification signal and said package size signal for billing purposes.
- 26. (Previously presented) A billing system as claimed in claim 11 wherein a dimension of a package is measured by determining the distance between the two most spaced apart sensors which detect the presence of said package.